SONY

Ultra HD Blu-ray™/ DVD Player

Operating Instructions

Thank you for your purchase. Before using this player, please read this operating instructions carefully. The software of this player may be updated in the future. Please visit the following website:

http://www.sony.com/bluraysupport/

Getting Started	
Playback	
Settings and Adjustments	
Additional Information	























Contents

WARNING	
Getting Started	
Supplied Accessories7Guide to Parts and Controls8Step 1: Connecting the Player11Step 2: Network Connection13Step 3: Easy Setup14	
Playback	_
Playing a Disc	
Settings and Adjustments	
Using the Settings Displays 20 [Software Update] 20 [Accessibility Settings] 20 [Screen Settings] 20 [Audio Settings] 22 [Bluetooth Settings] 23 [BD/DVD Viewing Settings] 23 [Parental Control Settings] 24 [Music Settings] 24 [System Settings] 24 [Network Settings] 25 [Easy Setup] 26 [Resetting] 26	
Additional Information	_
Troubleshooting	

Owner's Record

The model and serial numbers are located at the rear of the unit. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No	
Serial No.	

For Customers in the USA

If this product is not working properly, please call 1-800-222-SONY(7669).

For Customers in Canada

If this product is not working properly, please contact our **Customer Information Service Center** at 1-877-899-7669 or write to us at: Customer Information Service 115 Gordon Baker Road, Toronto, Ontario, M2H 3R6

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To avoid electrical shock, do not open the cabinet.

Refer servicing to qualified personnel only.

Do not expose batteries or appliances with battery-installed to excessive heat, such as sunshine and fire.

CAUTION

The use of optical instruments with this product will increase eye hazard. As the laser beam used in this Ultra HD Blu-ray /DVD player is harmful to eyes, do not attempt to disassemble the cabinet.

Refer servicing to qualified personnel only.



This label is located on the laser protective housing inside the enclosure.





This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



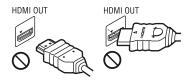
This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

PRECAUTIONS

- To reduce the risk of fire or electric shock, do not expose this appliance to dripping or splashing, and do not place objects filled with liquids, such as vases, on the appliance.
- Install this unit so that the AC power cord can be unplugged from the wall socket immediately in the event of trouble.
- This equipment has been tested and found to comply with the limits set out in the EMC Directive using a connection cable shorter than 3 metres.
- Place the player in a location with adequate ventilation to prevent heat build-up in the player.
- To reduce the risk of fire, do not cover the ventilation opening of the appliance with newspapers, tablecloths, curtains, etc.
- Do not expose the appliance to naked flame sources (for example, lighted candles).
- Do not install this player in a confined space, such as a bookshelf or similar unit.
- Do not place the player outdoors, in vehicles, on ships, or on other vessels.
- If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the player. Should this occur, the player may not operate properly. In this case, remove the disc and leave the player turned on for about half an hour until the moisture evaporates.

- Do not install the player in an inclined position. It is designed to be operated in a horizontal position only.
- Do not place metal objects in front of the front panel. It may limit reception of radio waves.
- Do not place the player in a place where medical equipment is in use. It may cause a malfunction of medical instruments.
- If you use a pacemaker or other medical device, consult your physician or the manufacturer of your medical device before using the wireless LAN function.
- Do not place heavy or unstable objects on the player.
- Do not place any objects other than discs on the disc tray. Doing so may cause damage to the player or the object.
- Take out any discs from the tray when you move the player. If you don't, the disc may be damaged.
- Disconnect the AC power cord and all other cables from the player when you move the player.
- The player is not disconnected from the AC power source as long as it is connected to the wall outlet, even if the player itself has been turned off.
- Disconnect the player from the wall outlet if you are not going to use the player for a long time. To disconnect the AC power cord, grasp the plug itself; never pull the cord.
- Observe following points to prevent the AC power cord being damaged. Do not use the AC power cord if it is damaged, as doing so may result in an electric shock or fire.
 - Do not pinch the AC power cord between the player and wall, shelf, etc.
- Do not put anything heavy on the AC power cord or pull on the AC power cord itself.
- Do not turn up the volume while listening to a section with very low level inputs or no audio signals. Your ears and the speakers may be damaged when the sound level reaches the peak.
- Clean the cabinet, panel, and controls with a soft cloth. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.
- Do not use cleaning discs or disc/lens cleaners (including wet or spray types).
 These may cause the apparatus to malfunction.
- In the events that this player is repaired, repaired parts may be collected for reuse or recycling purposes.

- Observe the following as improper handling may damage the HDMI OUT jack and the connector.
 - Carefully align the HDMI OUT jack on the rear of the player and the HDMI connector by checking their shapes. Make sure the connector is not upside down or tilted.



 Be sure to disconnect the HDMI cable when moving the player.



 Hold the HDMI connector straight when connecting or disconnecting the HDMI cable. Do not twist or force the HDMI connector into the HDMI OUT jack.

For United States customers. Not applicable in Canada, including in the province Of Quebec. Pour les consommateurs Aux États-Unis. Non applicable au Canada, y compris la province de Ouébec.

FCC WARNING

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

The shielded Interface cable (LAN cable) and bundled HDMI Cable or High Speed HDMI Cable with Cable Type Logo must be used with the equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

Ø

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

Contains FCC ID: MCLJ20H086

Compliance with FCC requirement 15.407©

Data transmision is always initiated by software, which is the passed down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets are initiated by MAC. These are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets is being transmitted. In other words, this device automatically discontinue transmission in case of either absence of information to transmit or operational failure.

Frequency Tolerance: ± 20 ppm

Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10)Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12)Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13)Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14)Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

For Customers in Canada

IC Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

Contains IC: 2878D-J20H086

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.
- 5 150 5 250 MHz band is restricted to indoor operations only.
- High-power radars are allocated as primary users (i.e. priority users) of the bands
 5 250 - 5 350 MHz and 5 650 - 5 850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

On watching 3D video images

Some people may experience discomfort (such as eve strain, fatique, or nausea) while watching 3D video images. Sony recommends that all viewers take regular breaks while watching 3D video images. The length and frequency of necessary breaks will vary from person to person. You must decide what works best. If you experience any discomfort, you should stop watching the 3D video images until the discomfort ends: consult a doctor if you believe necessary. You should also review (i) the instruction manual and/or the caution message of any other device used with, or Blu-ray Disc contents played with this product and (ii) our website (http://esupport.sonv.com/) for the latest information. The vision of young children (especially those under six years old) is still under development. Consult vour doctor (such as a pediatrician or eye doctor) before allowing young children to watch 3D video images. Adults should supervise young children to ensure they follow the recommendations listed above.

IMPORTANT NOTICE

Caution: This player is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Plasma display panel televisions and projection televisions are susceptible to this.

If you have any questions or problems concerning your player, please consult your nearest Sony dealer.

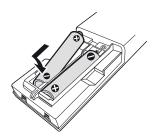
Getting Started

Supplied Accessories

- High Speed HDMI Cable (1)*
- Remote commander (remote) (1)
- Size AAA (R03) batteries (2)
- * Supplied for UBP-UX80

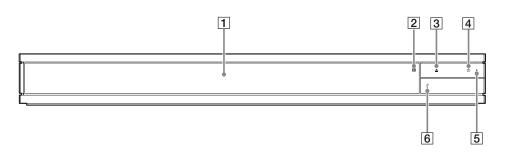
Inserting batteries into the remote control

Insert two size AAA (R03) batteries by matching the + and – ends on the batteries to the markings inside the battery compartments of the remote.



Guide to Parts and Controls

Front panel

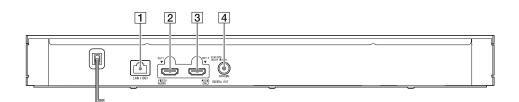


- 1 Door tray
- 2 Remote sensor
- 3 ≜ (open/close)
- 4 (b (on/standby)
 Turns on the player, or sets to standby mode.
- 5 Power indicator

Lights up when the player is turned on.

6 '\foating' (USB) jack cover Lift the cover to connect a USB device to this jack. See page 15.

Rear panel



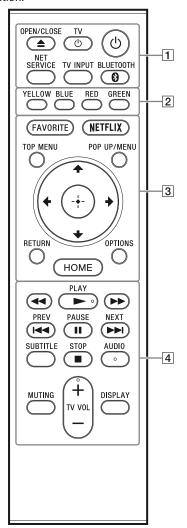
- 1 LAN (100) terminal
- 2 HDMI OUT 1 jack (VIDEO/AUDIO)
 Outputs digital video and audio signal.
- 3 HDMI OUT 2 jack (AUDIO ONLY)

Outputs digital audio signal only. Please remove the attached sticker to use the jack.

4 DIGITAL OUT (COAXIAL) jack

Remote

The available functions of the remote are different depending on the disc or the situation.



PLAY, TV VOL +, and AUDIO buttons have a tactile dot. Use the tactile dot as a reference when operating the player.

The player automatically returns to standby mode if no button on the player or remote is pressed for more than 20 minutes.

1 ▲ OPEN/CLOSE

Opens or closes the door tray.

TV () (on/standby)

Turns on the TV, or sets to standby mode. () (on/standby)

Turns on the player, or sets to standby mode.

NET SERVICE

Returns to the previous online service portal.

TV INPUT

Switches between TV and other input

BLUETOOTH (page 17)

- Scan device list will appear if this player has no paired Bluetooth device.
- Connect to the last connected device if this player has a paired Bluetooth device. If the connection fails, scan device list will appear.
- Disconnect the connected Bluetooth device.

2 Color buttons (YELLOW/BLUE/RED/ GREEN)

Shortcut keys for interactive functions.

3 FAVORITE (page 14)

Accesses the application registered as favorite.

NETFLIX

Accesses the "NETFLIX" online service. For further NETFLIX online service details, visit the following website and check the

http://www.sony.com/bluraysupport/

TOP MENU

Opens or closes the Ultra HD Blu-ray/BD/ DVD's Top Menu.

POP UP/MENU

Opens or closes the Ultra HD Blu-ray/BD/ DVD's menu.

OPTIONS (page 18)

Displays the available options on the screen.

RETURN

Returns to the previous display.

←/////

Moves the highlight to select a displayed item.



- ↑/↓ as a shortcut key to launch track search window and input track number during music CD playback.
- ↑/↓ as a shortcut key to rotate photo clockwise/counterclockwise by 90 degrees.
- ←/→ as a shortcut key to change still image when it is enabled to change.

Center button (ENTER)

Enters the selected item.

HOME

Enters the player's home screen.

4 **◄**/▶▶ (fast reverse/fast forward)

- Fast reverse/fast forward the disc when pressed during playback. The search speed changes each time you press the button.
- Plays in slow motion when pressed for more than one second in pause mode.
- Plays one frame at a time when pressed for a short time in pause mode.

► PLAY

Starts or re-starts playback.

I◀◀ PREV/NEXT ▶▶I

Skips to the previous/next chapter, track, or file.

II PAUSE

Pauses or re-starts playback.

SUBTITLE (page 23)

Selects the subtitle language when multilingual subtitles are recorded on Ultra HD Blu-ray/BD/DVD.

■ STOP

Stops playback and remembers the stop point (resume point).

The resume point for a title/track is the last point you played or the last photo for a photo folder.

AUDIO (page 23)

Selects the language track when multilingual tracks are recorded on Ultra HD Blu-ray/BD/DVD.

Selects the sound track on CDs.

MUTING

Turns off the TV sound temporarily.

TV VOL +/-

Adjusts the TV volume.

DISPLAY

Displays the playback information on the screen.

To lock the disc tray (Child Lock)

You can lock the disc tray to avoid accidental opening of the tray.

While the player is turned on, press ■ STOP, HOME, and then TOP MENU button on the remote to lock or unlock the tray.

Code numbers of controllable TVs

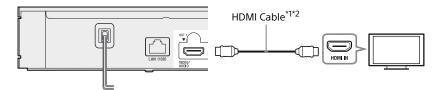
Hold down TV (b) and the TV manufacturer's code using the remote buttons for 2 seconds.

Manufacturer	Remote Button
Sony (Default)	NET SERVICE
Hitachi	TV INPUT
LG/Goldstar/NEC	₿ BLUETOOTH
Toshiba	Color button (YELLOW)
RCA	Color button (BLUE)
Mitsubishi/MGA	Color button (RED)
Pioneer	Color button (GREEN)
Sharp	FAVORITE
Panasonic	NETFLIX
Samsung	TOP MENU
Philips	POP UP/MENU
Vizio 1	RETURN
Vizio 2	OPTIONS
Vizio 3	HOME

Step 1: Connecting the Player

Do not connect the AC power cord until you have made all the connections.

Connecting to your TV



*1 See "Supplied Accessories" (page 7).

*2 Premium High Speed HDMI Cable (not supplied) or High Speed HDMI Cable that supports 18 Gbps bandwidth (not supplied).

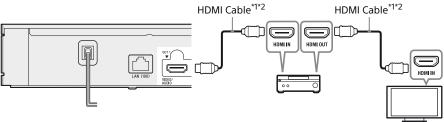
Ø

- To enjoy 4K Ultra HD 60p content, you need to connect the player to your 4K TV using Premium High Speed HDMI Cable or High Speed HDMI Cable that supports 18 Gbps bandwidth.
- 4K output requires a compatible 4K display which has HDCP2.2 capable HDMI input.
- If you use BRAVIA TV that supports 4K60p, set the TV's "HDMI signal format" setting to "Enhanced format".

Connecting to your AV amplifier (receiver)

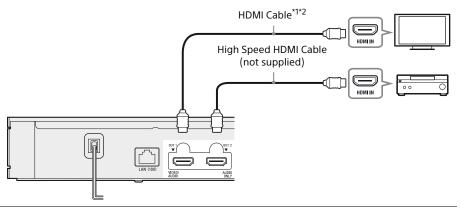
Select (A), (B) or (C) connection methods according to the input jacks on your AV amplifier (receiver).

4K AV amplifier (receiver)

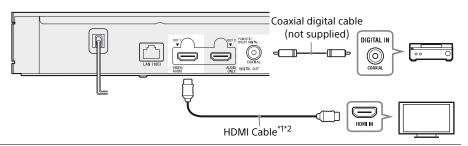


→ To enjoy Bitstream (Dolby/DTS), set [BD Audio MIX Setting] in [Audio Settings] (page 22).

On-4K AV amplifier (receiver) with HDMI IN



⊙ Non-4K AV amplifier (receiver) without HDMI IN



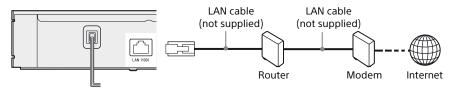
^{*1} See "Supplied Accessories" (page 7).

^{*2} Premium High Speed HDMI Cable (not supplied) or High Speed HDMI Cable that supports 18 Gbps bandwidth (not supplied).

Step 2: Network Connection

If you are not going to connect the player to a network, proceed to "Step 3: Easy Setup" (page 14).

Wired Setup



ΰ

The use of a shielded and straight interface cable (LAN cable) is recommended.

Wireless Setup



Ğ,

No cable assembly required between the player and the wireless LAN router.

Step 3: Easy Setup

When turned on for the first time

Wait for a short while before the player turns on and starts [Easy Setup].

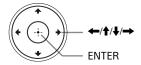
1 Plug the player into the AC outlet.



2 Press (b) to turn on the player. Power indicator lights up.



- 3 Turn on the TV and press TV INPUT button on the remote to set the input selector. This will show the signal from the player on your TV screen.
- 4 Perform [Easy Setup].
 Follow the on-screen instructions to make the basic settings using ←/↑/↓/→ and press ENTER on the remote.

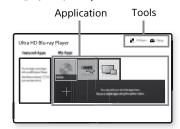


Ø

- When [Easy Setup] is complete, the player will automatically find the available network.
- If there is no output or black screen appears, refer to "Troubleshooting" (page 27).

Home screen display

The home screen appears when you press HOME. Select an application using $\leftarrow/\uparrow/\rlap{-}\rightarrow$, and press ENTER.



[My Apps]: Manages favorite application. You may add shortcuts for application from [All Apps].

[Featured Apps]: Displays recommended application.

[All Apps]: Shows all available applications. You can add applications to [My Apps] by pressing OPTIONS, and select [Add to My Apps].

[Setup]: Adjusts the player's settings.

Available options

Various settings and playback operations are available by pressing OPTIONS. The available items differ depending on the situation.

[Move Application]: Arranges applications in [My Apps].

[Remove Application]: Deletes applications in [My Apps].

[Register as Favorite]: Registers 1 application into FAVORITE remote button.

[Data Contents]: Displays the contents of the mixed disc.

Playback

Playing a Disc

For "Playable discs", see page 30.

 Press OPEN/CLOSE, and place a disc on the disc tray.



Playing side facing down

2 Press ■ OPEN/CLOSE to close the disc tray.

Playback starts.



(Mixed disc) contains data contents. Press OPTIONS on the remote and select [Data Contents] to display any available contents.

Enjoying 4K Ultra HD Blu-ray

- 1 Prepare for 4K Ultra HD Blu-ray playback.
 - Connect the player to your 4K TV using a Premium High Speed HDMI Cable.
 - To view 4K Ultra HD 60p content, make sure that the proper setting is selected in HDMI settings on your TV.
 - If you use BRAVIA TV that supports 4K60p, set the TV's "HDMI signal format" setting to "Enhanced format".
- 2 Insert a 4K Ultra HD Blu-ray disc. The operation method differs depending on the disc. Refer to the instruction manual supplied with the disc.

Ø

When playing a 4K Ultra HD Blu-ray disc with no disc key, it may require network connection depending on the network environment and official key server (Studio).

Enjoying Blu-ray 3D

- 1 Prepare for Blu-ray 3D disc playback.
 - Connect the player to your 3Dcompatible devices using a High Speed HDMI Cable.
 - Set [3D Output Setting] and [TV Screen Size Setting for 3D] in [Screen Settings] (page 20).
- 2 Insert a Blu-ray 3D disc.

The operation method differs depending on the disc. Refer to the instruction manual supplied with the disc.



Refer also to the instruction manuals supplied with your TV and the connected device.

Playing from a USB Device

For "Playable types of files", see page 31.

1 Lift the USB jack cover.



2 Connect the USB device to the USB jack on the player.



- 3 Select □ [USB device] using ←/↑/↓/→, and press ENTER.
- 4 Select [Video], [Music], or [Photo] category using ↑/↓, and press ENTER.

Playing via a Network

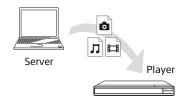
Playing files on a Home Network

A Home Network-compatible product can play video/music/photo files stored on another Home Network-compatible product via a network.

Prepare to use Home Network.

- 1 Connect the player to a network (page 13).
- 2 Prepare the other necessary Home Network-compatible products. Refer to the instruction manual supplied with the product.

To play a file from a Home Network server via this unit (Home Network player)



Select [Video], [Music], or [Photo] category from $\footnote{$\mbox{}\mbox{\mb

To play a file from a Home Network server via another product (Renderer)

When you play files from a Home Network Server on this unit, you can use a Home Network Controller-compatible product (a phone, etc.), to control playback.



Control this unit using a Home Network controller. Refer to the instruction manual supplied with the Home Network controller.

Using "Video & TV SideView"

"Video & TV SideView" is a free mobile application for remote devices (such as smartphone, etc.). By using "Video & TV SideView" with this player, you can easily enjoy the player by using the operation on your remote device. You can launch a service or application directly from the remote device and view the disc information during disc playback. "Video & TV SideView" also can be used as a remote control and software keyboard.

Before you use the "Video & TV SideView" device with this player for the first time, be sure to register the "Video & TV SideView" device. Follow the on-screen instructions on the "Video & TV SideView" device for registration.



The registration can only be performed on the home screen

Using SongPal Link/SongPal

SongPal is a dedicated app for operating SongPal-compatible audio devices (e.g. wireless speaker) that are manufactured by Sony. You can listen to music stored on your audio CD (CD-DA) and USB device with this player from multiple places under the same network. For more information, please visit http://sony.net/nasite/. You are required to use your mobile device (smartphone or tablet) and wireless router to use this app. Search for SongPal on Google Play™ or the App Store and download using your mobile device.



Connecting to a mobile device

- 1 Connect the player to a network (page 13).
- 2 Set [Auto Home Network Access Permission] in [Network Settings] to [On].
- **3** Connect your mobile device to the same SSID (network) by Wi-Fi.
- **4** Launch and follow the instructions on SongPal app.



- For further SongPal apps details, visit http://songpal.sony.net/
- For SongPal Link/SongPal Help, visit http://info.songpal.sony.net/help/

Using Screen mirroring

"Screen mirroring" is a function to display the screen of a mobile device on the TV by Miracast technology.

The player can be connected directly with a Screen mirroring compatible device (e.g. smartphone, tablet). You can enjoy the display screen of the device on your large TV screen. No wireless router (or access point) is required to use this feature.



- When using Screen mirroring, the quality of picture and sound may sometimes be deteriorated due to interference from other network. You may improve by adjusting [Screen mirroring RF Setting] (page 25).
- Some network functions may not be available during Screen mirroring.
- Make sure that the device is compatible with Miracast. Connectivity with all Miracast compatible devices is not guaranteed.
- Select [Screen mirroring] from home screen using ←/↑/↓/→, and press ENTER.
- **2** Follow the on-screen instructions.

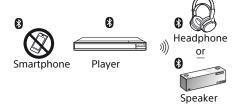
Listening to Audio through a Bluetooth® Device

You can enjoy wireless playback of audio from this player on a Bluetooth wireless technology compatible device.
You need to pair the Bluetooth device and this player to each other before connection.

Ø

This function is only supported with Bluetooth speaker or Bluetooth headphone. Smartphone is not supported.

Example:



Connecting to a Bluetooth device

Set [Bluetooth Mode] in [Bluetooth Settings] to [On] (page 23) before pairing a Bluetooth device with this player.

- 1 Place the Bluetooth device within 1 meter from the player.
- **2** Perform any of the following steps:
 - When connecting to a device for the first time, press BLUETOOTH button on the remote.
 - Select [Bluetooth Device] option on the playback screen.
 - Select [Device List] in [Bluetooth Settings].
- 3 Set the Bluetooth device in pairing mode. For details on setting the Bluetooth device in pairing mode, refer to the instruction manual supplied with the device.
- 4 Press ↑/↓ repeatedly to select the device you want, and press ENTER. When the Bluetooth connection is established, the device name will appear on the TV screen.

Adjusting the Volume

- 1 Start playback content.
- 2 Adjust the volume of the Bluetooth device first. If the volume level is still low/high, press OPTIONS on the remote during playback screen and select [Bluetooth Volume], then press ↑/ ↓ to adjust the volume.

Ø

- Some Bluetooth device does not support volume control.
- Do not use high volume from the start or for a long period. Your ears and the audio device may be damaged.

Disconnecting the Bluetooth device

Perform any of the following steps:

- Press BLUETOOTH button on the remote (page 9).
- Disable the Bluetooth function on the Bluetooth device.
- Turn off the player or the Bluetooth device.

63

Before you turn off your Bluetooth device, turn down the volume level of your TV to avoid sudden high volume outbursts.

Listening to Audio through a Bluetooth device and HDMI output

You can enjoy audio playback from this player via a Bluetooth device and HDMI output simultaneously.

To set this function, perform any of the following steps:

- Set [Bluetooth Output] in [Bluetooth Settings] to [Bluetooth + HDMI].
- Press OPTIONS on the remote during any playback and select [Bluetooth Output], then select [Bluetooth + HDMI].

6

- Same audio content is output via Bluetooth device and HDMI output.
- This feature cannot establish Surround system.
- HDMI audio format may be changed.
- Audio output timing between HDMI and Bluetooth may not synchronize.
- If the Bluetooth speaker is far from the player, in a different room, or separated by a wall, Bluetooth connection will be unstable.

Available Options

Various settings and playback operations are available by pressing OPTIONS. The available items differ depending on the situation.

Common options

- [Repeat Setting]*1: Sets the repeat mode.
- [Play]/[Stop]: Starts or stops the playback.
- [Play from beginning]: Plays the item from the beginning.
- [Bluetooth Output]*2: Switches between audio output from Bluetooth device only or from both Bluetooth device and HDMI output during Bluetooth connection.
- [Bluetooth Device]*2: Displays Bluetooth device list.
- [Bluetooth Volume]^{*2}: Displays the Bluetooth volume control view. This option item is only available when the Bluetooth device is connected.
- [Accessibility]*3*4:
 - -[Screen Reader]
 - -[Enlarge]
 - -[Closed Captions] (For US customers only)*5

Video only

- [3D Output Setting]: Sets whether or not to output 3D video automatically.
- [A/V SYNC]: Adjusts the gap between picture and sound, by delaying the sound output in relation to the picture output (0 to 120 milliseconds).
- [HDR Conversion]*6: Converts High Dynamic Range (HDR) signal to Standard Dynamic Range (SDR) signal when the player is connected to a TV or a Projector that does not support HDR input. A picture is more similar to HDR when larger value is selected, but lowers overall brightness.

■ [Video Settings]:

- [Picture Quality Mode]: Selects the picture settings for different lighting environments.
 - [Direct]
 - [Brighter Room]*7
 - [Theater Room]*7
 - [Auto]

- [Custom1]/[Custom2]
 - [FNR]: Reduces the random noise appearing in the picture.
 - [BNR]: Reduces the mosaic-like block noise in the picture.
 - [MNR]: Reduces minor noise around the picture outlines (mosquito noise).
 - [Contrast]
 - [Brightness]
 - [Color][Hue]
- [Pause]: Pauses the playback.
- [Title Search]: Searches for a title on Ultra HD Blu-ray/BD/DVD VIDEO and starts playback from the beginning.
- [Chapter Search]: Searches for a chapter and starts playback from the beginning.
- [Closed Captions] (For US customers only): Selects closed caption format when available.

Music only

- [Track Search]: Searches the track number during music CD playback.
- [Add Slideshow BGM]: Registers music files in the USB memory as slideshow background music (BGM).
- [Music Search]: Displays information on the audio CD (CD-DA) based on Gracenote technology.
 - Searches for related information using keywords from Gracenote when selecting [Track], [Artist] or [Related]. Displays a list of titles when selecting [Playback History] or [Search History].
- [Shuffle Setting]: Set to [On] to playback music files in randomized order.
- [Group Search]: Searches for the group number during DVD AUDIO playback.

Video and Music only

- [Top Menu]: Displays the Ultra HD Blu-ray/ BD/DVD's Top Menu.
- [Menu]/[Popup Menu]: Displays the Ultra HD Blu-ray/BD's Pop-up Menu or DVD's menu.
- [Audio]: Switches the language track when multilingual tracks are recorded on Ultra HD Blu-ray/BD/DVD. Selects the sound track on CDs.
- [Subtitle]: Switches the subtitle language when multilingual subtitles are recorded on Ultra HD Blu-ray/BD/DVD.

- [Angle]: Switches to other viewing angles when multi-angles are recorded on Ultra HD Blu-ray/BD/DVD.
- [Number Entry]: Selects the number by using ←/↑/↓/→ key on the remote.

Photo only

- [Slideshow Speed]: Changes the slideshow speed.
- [Slideshow Effect]: Sets the effect for slideshows.
- [Slideshow BGM]*8:
 - [Off]: Turns off the function.
 - [My Music from USB]: Sets the music files registered in [Add Slideshow BGM].
 - [Play from Music CD]: Sets the tracks in CD-DAs.
- [2D Playback]*9: Sets playback to 2D image.
- [Change Display]: Switches between [Grid View] and [List View].
- [View Image]: Displays the selected photo.
- [Slideshow]: Plays a slideshow.
- [Rotate Left]: Rotates the photo counterclockwise by 90 degrees.
- [Rotate Right]: Rotates the photo clockwise by 90 degrees.

6

- *1 [Repeat Setting] is not available during BDJ titles playback or HDMV interactive title.
- *2 [Bluetooth Output], [Bluetooth Device] and [Bluetooth Volume] are not available during Home Network photo playback.
- *3 [Accessibility] is only available when [Accessibility Shortcut] in [Accessibility Settings] is set to [On].
- *4 [Accessibility] is not available during photo or music playback.
- *5 [Closed Captions] is only available during video playback.
- *6 [HDR Conversion] is only available during HDR video playback, when your display device is not compatible with HDR display, or when [HDR Output] in [Screen Settings] is set to [Off].
- *7 [Brighter Room] and [Theater Room] are not available during HDR video playback.
- *8 [Slideshow BGM] is not available during Home Network photo playback.
- *9 [2D Playback] is only available during 3D photo playback.

Settings and Adjustments

Using the Settings Displays

Select [Setup] on the home screen when you need to change the settings of the player.

The default settings are underlined.

- 1 Select **(Setup)** on the home screen using $\leftarrow / \uparrow / \downarrow / \rightarrow$.
- 2 Select the setup category icon using **↑**/**↓**, and press ENTER.



🚺 [Software Update]

■ [Update via Internet]

Updates the player's software using available network. Make sure that the network is connected to the Internet. See "Step 2: Network Connection" (page 13).

■ [Update via USB Memory]

Updates the player's software using USB memory. Create a folder named "UPDATE" and all the update files must be stored in this folder. The player can recognize up to 500 files/folders in a single layer including the update files/folders.



- We recommend performing the software update every 2 months or so.
- If your network condition is poor, visit http://www.sony.com/bluraysupport/ to download the latest software version and update via USB memory.

You can also get information about update functions from the website.

☆ [Accessibility Settings]

■ [Screen Reader Settings]

[Screen Reader]

On: Turns on the function. [Off]: Turns off the function.

[Speech Rate]

[Very Fast] / [Fast] / [Normal] / [Slow] / [Very Slowl: Sets the reading speed.

[Speech Volume]

[High] / [Medium] / [Low]: Sets the reading volume.

[Prioritize Speech Audio]

[On]: Lowers the background sound volume when the sound overlaps with the read-out speech or the auditory signal.

[Off]: Turns off the function.

[Speech Verbosity]

[High]: Read-out in detailed style. [Low]: Read-out in simplified style.

6)

This setting works with NETFLIX service only.

■ [Enlarge]

[On]: Text is displayed in large size. [Off]: Text is displayed in normal size.

■ [Auto-Scroll Speed]

[Fast] / [Normal] / [Slow] / [Very Slow]: Sets the speed of automatic text scrolling.

■ [Accessibility Shortcut]

[On]: Turns on the shortcut in options

[Off]: Turns off the shortcut.

[Screen Settings]

■[HDR Output]

[Auto]: Outputs HDR signal depending on contents and HDMI-SINK capability. Conversion function is applied when content is HDR and HDMI-SINK does not support HDR. [Off]: Always output SDR.

■ [Display Type]

[TV]: Select this when the player is connected

[Projector]: Select this when the player is connected to Projector.



[HDR Conversion] will be adjusted according to the display type you select. Even though same setting value of [HDR Conversion] is selected, dynamic range of picture is different.

■ [Output Video Resolution]

Normally select [Auto]. Select [Original Resolution] to output the resolution recorded on the disc. When the resolution is lower than the SD resolution, it is scaled up to the SD resolution.

■ [24p Output]

Outputs 24p video signals only when you connect a 24p-compatible TV via an HDMI connection and the [Output Video Resolution] is set to [Auto], [1080p] or [4K].

[Ultra HD Blu-ray/BD-ROM]

[Auto]: Outputs 24 Hz video signals only when connecting a 24p-compatible TV using the HDMI OUT jack.

[On]: Turns on the function.

[Off]: Select this when your TV is not compatible with 24p video signals.

[DVD-ROM]

Auto]: Outputs 24 Hz video signals only when connecting a 24p-compatible TV using the HDMI OUT jack.

[Off]: Select this when your TV is not compatible with 24p video signals.

[Data content]

This function is available for playback contents stored in USB memory or data disc. [Auto]: Outputs 24 Hz video signals only when connecting a 24p-compatible TV using the HDMI OUT jack.

[Off]: Select this when your TV is not compatible with 24p video signals.

[Network content]

This function is available for playback contents from other network, such as Home Network, Screen mirroring, etc.

[Auto]: Outputs 24 Hz video signals only when connecting a 24p-compatible TV using the HDMI OUT jack.

[Off]: Select this when your TV is not compatible with 24p video signals.

■ [4K Upscale Setting]

[Auto1]: Outputs 2K (1920 × 1080) video signals during video playback and 4K video signals during photo play when connecting to a Sony 4K-compatible equipment. Outputs 4K video signals when connecting to a non-Sony 4K-compatible equipment. This setting does not work for 3D video image playback.

[Auto2]: Automatically outputs 4K video signals when you connect a 4K-compatible equipment.

[Off]: Turns off the function.



If your Sony equipment is not detected when [Auto1] is selected, the setting will have the same effect as [Auto2] setting.

■ [YCbCr/RGB (HDMI)]

[Auto]: Automatically detects the connected TV type, and switches to the matching color setting.

[YCbCr (4:2:2)]: Outputs YCbCr 4:2:2 video signals.

[YCbCr (4:4:4)]: Outputs YCbCr 4:4:4 video signals.

[RGB]: Outputs RGB video signals.

■ [HDMI Deep Color Output]

[Auto]: Outputs 12bit/10bit video signals when the connected TV is compatible with Deep Color.

[Off]: Select this when the picture is unstable or colors appear unnatural.

■ [IP Content NR]

[Auto] / [Strong] / [Medium] / [Mild]: Adjust the picture quality for Internet content. [Off]: Turns off the function.

■ [3D Output Setting]

[Auto]: Normally select this. [Off]: Select this to display all content in 2D or to enjoy 4K output using 3D content.

■ [TV Screen Size Setting for 3D]

Sets the screen size of your 3D-compatible TV

■ [TV Type]

[16:9]: Select this when connecting to a widescreen TV or a TV with a wide mode function. [4:3]: Select this when connecting to a 4:3 screen TV without a wide mode function.

■ [Screen Format]

[Full]: Select this when connecting to a TV with a wide mode function. Displays a 4:3 screen picture in 16:9 aspect ratio even on a wide-screen TV.

[Normal]: Changes the picture size to fit the screen size with the original picture aspect ratio.

■ [DVD Aspect Ratio]

[Letter Box]: Displays a wide picture with black bands on the top and bottom. [Pan & Scan]: Displays a full-height picture on the entire screen, with trimmed sides.

■ [Cinema Conversion Mode]

[Auto]: Normally select this. The player automatically detects whether the material is video-based or film-based, and switches to the appropriate conversion method. [Video]: The conversion method suited for video-based material will always be selected regardless of the material.

■ [Pause Mode]

[Auto]: Normally select this. Dynamic moving pictures appear without blurring. [Frame]: Displays static pictures at high resolution.

(Audio Settings)

■ [Digital Audio Output]

[Auto]: Normally select this. Outputs audio signals according to the status of the connected devices.

[PCM]: Outputs PCM signals from the DIGITAL OUT (COAXIAL)/HDMI OUT jack. Select this if there is no output from the connected device.

63

This function is disabled during connection with a Bluetooth device. Audio format may be changed during Bluetooth connection.

■ [DSD Output Mode]

[Auto]: Outputs DSD signal from HDMI OUT jack when playing Super Audio CD & DSD format file (if the connected device also supports DSD).

Outputs LPCM signal from HDMI OUT jack when playing Super Audio CD & DSD format file (if the connected device does not support DSD).

[Off]: Outputs PCM signals from HDMI OUT jack when playing Super Audio CD and DSD format file.

6

This function is disabled during connection with a Bluetooth device. Audio format may be changed during Bluetooth connection.

■ [BD Audio MIX Setting]

[On]: Outputs the audio obtained by mixing the interactive and secondary audio to the primary audio.

[Off]: Outputs the primary audio only. Select this to output Bitstream (Dolby/DTS) signals to an AV amplifier (receiver).

Ö

To enjoy Bitstream (Dolby/DTS) signals, set [BD Audio MIX Setting] to [Off] and [Digital Audio Output] to [Auto].

■[DTS Neo:6]

[Cinema]/[Music]: Outputs the simulated multi-channel sound from 2 channel sources via the HDMI OUT jack according to the capability of the connected device using [Cinema]/[Music] mode.
[Off]: Outputs the sound with its original number of channels via the HDMI OUT jack.

()

When [DTS Neo:6] is set to [Cinema] or [Music], [DSEE HX] cannot be set to [On].

■ [48kHz/96kHz/192kHz PCM]

[48kHz]/[96kHz]/[192kHz]: Sets the sampling frequency for the PCM signals output from the DIGITAL OUT (COAXIAL) jack.

Ø

Some device does not support [96kHz] and [192kHz] sampling frequency.

■[DSEE HX]

[On]: Upscales the audio file to a High-Resolution Audio file and reproduces the clear high-range sound which is often lost. [Off]: Turns off the function.

Ø

Source must be 2ch and 44.1/48 kHz.

■ [Audio DRC]

[Auto]: Performs playback at the dynamic range specified by the disc (BD-ROM only). Other discs are played back at the [On] level. [On]: Performs playback at a standard compression level.

[Off]: No compression works. A more dynamic sound is produced.

■ [Downmix]

[Surround]: Outputs audio signals with surround effects. Select this when connecting an audio device that supports Dolby Surround (Pro Logic) or DTS Neo:6. [Stereo]: Outputs audio signals without surround effects. Select this when connecting an audio device that does not support Dolby Surround (Pro Logic) or DTS Neo:6.



[Bluetooth Settings]

For "Listening to Audio through a Bluetooth® Device", see page 17.

■ [Bluetooth Mode]

[On]: Enables Bluetooth settings and functions.

[Off]: Disables Bluetooth settings and functions.

■ [Device List]

Displays a list of paired and detected Bluetooth receivers when [Bluetooth Mode] is set to [On].

■ [Bluetooth Codec - AAC] / [Bluetooth Codec - LDAC

This function is enabled when [Bluetooth Model is set to [On]. [On]: Enables AAC/LDAC codec.

Off: Disables AAC/LDAC codec.



This function is disabled during connection with a Bluetooth device



LDAC is an audio coding technology developed by Sony that enables the transmission of High-Resolution (Hi-Res) Audio content, even over a Bluetooth connection. Unlike other Bluetooth compatible coding technologies such as SBC, it operates without any down-conversion of the Hi-Res Audio content*, and allows approximately three times more data** than those other technologies to be transmitted over a Bluetooth wireless network with unprecedented sound quality, by means of efficient coding and optimized packetization.

- Excluding DSD format contents.
- In comparison with SBC (Subband Coding) when the bitrate of 990 kbps (96/48 kHz) or 909 kbps (88.2/44.1 kHz) is selected.

■ [Wireless Playback Quality]

This function is enabled when [Bluetooth] Mode] and [Bluetooth Codec - LDAC] is set to [On]. If video streaming via Wi-Fi is unstable, please select [Connection] in below setting and Wi-Fi connection will be stable. [Auto]: Sets the transmission data rate for

LDAC automatically.

[Sound Quality]: The highest data rate is used. It is recommended for listening to music, but audio playback may become unstable if the link quality is not sufficient. [Standard]: A medium data rate is used. This provides a balance between sound quality and playback stability.

[Connection]: Stability is prioritized. The sound quality may be reasonable and the connection status will most likely be stable.

■ [Bluetooth Output] (page 18)

[Bluetooth]: Outputs audio from Bluetooth device.

[Bluetooth + HDMI]: Outputs audio from both Bluetooth device and HDMI output.

[BD/DVD Viewing **Settings**

■ [BD/DVD Menu Language]

Selects the default menu language for Ultra HD Blu-ray/BD/DVD VIDEO. Select [Select Language Code], and enter the code for your language, referring to "Language code list" (page 39).

■ [Audio Language]

Selects the default audio language for Ultra HD Blu-ray/BD/DVD VIDEO. When you select [Original], the language given priority in the disc is selected. Select [Select Language Code], and enter the code for your language, referring to "Language code list" (page 39).

■ [Subtitle Language]

Selects the default subtitle language for Ultra HD Blu-ray/BD/DVD VIDEO. Select [Select Language Code], and enter the code for your language, referring to "Language code list" (page 39).

■ [BD Hybrid Disc Playback Layer]

[BD]: Plays BD layer.

[DVD/CD]: Plays DVD or CD layer.

■ [BD Internet Connection]

[Allow]: Allows Internet connection from BD contents.

[Do not allow]: Prohibits Internet connection from BD contents.

■ [Delete BD Data]

Deletes data in the USB memory. All data stored in the buda folder will be erased.

■ [DVD-Audio Playback]

[DVD-Audio]: Plays DVD AUDIO content. [DVD-Video]: Plays DVD VIDEO content only.

[Parental Control Settings]

■ [Password]

Sets or changes the password for the Parental Control function. A password allows you to set a restriction on Ultra HD Blu-ray/BD/DVD VIDEO and Internet video playback. If necessary, you can differentiate the restriction levels for Ultra HD Blu-ray/BD/DVD VIDEO and Internet video.

■ [Parental Control Area Code]

Playback of some Ultra HD Blu-ray/BD/DVD VIDEO or Internet video can be limited according to the geographic area. Scenes may be blocked or replaced with different scenes. Follow the on-screen instructions and enter your four-digit password.

■ [BD Parental Control] / [DVD Parental Control] / [Internet Video Parental Control]

By setting Parental Control, scenes can be blocked or replaced with different scenes. Follow the on-screen instructions and enter your four-digit password.

■ [Internet Video Unrated]

[Allow]: Allows the playback of unrated Internet videos.

[Block]: Blocks the playback of unrated Internet videos

[Music Settings]

■ [Super Audio CD Playback Layer]

[Super Audio CD]: Plays the Super Audio CD layer.

[CD]: Plays the CD layer.

■ [Super Audio CD Playback Channel]

[DSD 2ch]: Plays the 2ch area.

[DSD Multi]: Plays the multi-channel area.

[System Settings]

■[OSD Language]

Selects on-screen display language for your player.

■[Closed Caption Settings] (For US customers only)

Customizes the format of Closed Caption displayed.

Select [Original] in [Text Settings] setting to disable.

■[HDMI Settings]

By connecting Sony components that are compatible with HDMI functions with a High Speed HDMI Cable, operation is simplified.

[Control for HDMI]

[On]: The following BRAVIA Sync features are available:

- One-Touch Play
- System Power-Off
- Language Follow
- [Off]: Turns off the function.



For details, refer to the instruction manual supplied with the TV or components. To enable the BRAVIA Sync features, connect your TV via the HDMI OUT 1 jack.

[Linked to TV-off]

[Valid]: Automatically turns off the player when the connected TV enters standby mode (BRAVIA Sync).

[Invalid]: Turns off the function.

■ [HDMI Audio Output]

[Auto]: Outputs audio signal via HDMI OUT 2 iack if it is connected to a device and the device is turned on. Otherwise, outputs audio signal via HDMI OUT 1 jack.

[HDMI1]: Outputs audio signal via HDMI OUT 1

[HDMI2]: Outputs audio signal via HDMI OUT 2 iack.

■ [Quick Start Mode]

[On]: Shortens the startup time when turning on the player.

[Off]: Reduces standby power consumption.

■ [Auto Display]

[On]: Automatically displays information on the screen when changing the viewing titles, picture modes, audio signals, etc.

[Off]: Displays information only when you press DISPLAY.

■ [Software Update Notification]

[On]: Sets the player to inform you of newer software version information (page 20). [Off]: Turns off the function.

■ [Gracenote Settings]

[Auto]: Automatically downloads audio CD (CD-DA) disc information before audio CD (CD-DA) disc playback after audio CD (CD-DA) disc recognition. Connect to the network for downloading.

[Manual]: Downloads the disc information when [Music Search] is selected.

■ [Device Name]

Displays the player's name. The player's name can be changed.

■ [System Information]

Displays the player's software version information and the MAC address.

■ [Software License Information]

Displays information about the Software License.

(Network Settings)

■ [Internet Settings]

Connect the player to the network beforehand. For details, see "Step 2: Network Connection" (page 13).

[Wired Setup]: Select this when you connect to a broadband router using a LAN cable. [Wireless Setup]: Select this when you use the wireless LAN that is built into the player for wireless network connection.



For further details, visit the following website and check the FAQ contents: http://www.sony.com/bluraysupport/

■ [Network Connection Status]

Displays the current network status.

■ [Network Connection Diagnostics]

Checks for the proper network connection by running the network diagnostics.

■ [Screen mirroring RF Setting]

[Auto]: Sets the RF (Radio Frequency) channel band automatically for Screen mirroring connection.

[CH1]/[CH6]/[CH11]: Sets CH1/CH6/CH11 as priority.

■ [Connection Server Settings]

Sets whether or not to display the connected server.

■ [Auto Home Network Access Permission]

[On]: Allows automatic access from newly detected Home Network controllercompatible product. [Off]: Turns off the function.

■ [Home Network Access Control]

Displays a list of Home Network controllercompatible products and sets whether or not to accept commands from the controllers in the list.

■ [Registered Remote Devices]

Displays a list of your registered remote devices.

■ [Remote Start]

[On]: Allows you to turn on the player by a device linked via a network. [Off]: Turns off the function.

[Easy Setup]

See "Step 3: Easy Setup" (page 14).

[Resetting]

■ [Reset to Factory Default Settings]

Resets the player settings to the factory default by selecting the group of settings. All the settings within the group will be reset.

■ [Initialize Personal Information]

Erases your personal information stored in the player.



If you dispose, transfer or resell this unit, please delete all Personal Information for security purposes. Please take the appropriate measures such as logging out after using a network service.

Additional Information

Troubleshooting

If a problem occurs while operating the player, use this troubleshooting guide to help remedy the problem before requesting repairs. If the problem persists, consult your nearest Sony dealer.

Picture

No picture or the picture is not output correctly.

- Check that all the cables are securely connected (page 11).
- Switch the input selector on your TV to display the signal from the player.
- Reset the [Output Video Resolution] to the lowest resolution by pressing ■ STOP, HOME, and then POP UP/MENU button on the remote.
- Try the following: ①Turn the player off and on again. ②Turn the connected equipment off and on again. ②Disconnect and then reconnect the HDMI cable.
- The HDMI OUT jack is connected to a DVI device that does not support copyright protection technology.
- Check the [Output Video Resolution] settings in [Screen Settings] (page 21).
- For Ultra HD Blu-ray/BD-ROM/DVD-ROM/ Data content/Network content, check the [24p Output] settings in [Screen Settings] (page 21).
- For 4K output, please make sure that the player is connected to 4K display that supports HDCP2.2 capable HDMI input using Premium High Speed HDMI Cable or High Speed HDMI Cable that supports 18 Gbps bandwidth (page 11).

The display language on the screen switches automatically when connected to the HDMI OUT jack.

When [Control for HDMI] in [HDMI Settings] is set to [On] (page 24), the display language on the screen automatically switches according to the language setting of the connected TV (if you change the setting on your TV, etc.).

Sound

No sound or the sound is not output correctly.

- Check that all the cables are securely connected (page 12).
- Switch the input selector on your AV amplifier (receiver) so that the audio signals of the player are output from your AV amplifier (receiver).
- If the audio signal does not come through the DIGITAL OUT (COAXIAL)/HDMI OUT jack, check the audio settings (page 22).
- For HDMI connections, try the following:

 Turn the player off and on again.
 Turn the connected equipment off and on again.

 Disconnect and then reconnect the HDMI cable.
- For HDMI connections, if the player is connected to a TV through an AV amplifier (receiver), try connecting the HDMI cable directly to the TV. Refer also to the instruction manual supplied with the AV amplifier (receiver).
- The HDMI OUT jack is connected to a DVI device (DVI jacks do not accept audio signals).
- The device connected to the HDMI OUT jack does not support the audio format of the player. Check the audio settings (page 22).
- Check the [HDMI Audio Output] settings in [System Settings] (page 25).

The HD Audio (Dolby Digital Plus, Dolby TrueHD, DTS-HD High Resolution Audio, DTS-HD Master Audio, Dolby Atmos and DTS:X) is not output by bitstream.

- Set [BD Audio MIX Setting] in [Audio Settings] to [Off] (page 22).
- Check that the AV amplifier (receiver) is compatible with each HD Audio format.

The interactive audio is not output.

• Set [BD Audio MIX Setting] in [Audio Settings] to [On] (page 22).

Message Code 3 [Audio outputs temporarily muted. Do not adjust the playback volume. The content being played is protected by Cinavia and is not authorized for playback on this device. For more information, see http://www.cinavia.com. Message Code 3] appears on the screen when playing a disc.

 The audio track of the video that you are playing contains a Cinavia code indicating that it is an unauthorized copy of professionallyproduced content (page 36).

Disc

The disc does not play.

- The disc is dirty or skewed.
- The disc is upside down. Insert the disc with the playback side facing down.
- The disc has a format that cannot be played back by this player (page 30).
- The player cannot play a recorded disc that is not correctly finalized.
- The region code on the BD/DVD does not match the player.

USB device

The player does not detect a USB device connected to the player.

- Make sure that the USB device is securely connected to the USB jack.
- Check if the USB device or a cable is damaged.
- Check if the USB device is on.
- If the USB device is connected via a USB hub, connect the USB device directly to the player.

Internet streaming

The picture/sound is poor/certain programmes display a loss of detail, especially during fast-motion or dark scenes.

 Picture/sound quality may be improved by changing the connection speed.
 Recommended connection speed is of at least 2.5 Mbps for standard definition video, 10 Mbps for high definition video and at least 25 Mbps for Ultra HD video (depending on the service provider).

Internet streaming via Wi-Fi is unstable when connected with Bluetooth device using LDAC.

 Set [Wireless Playback Quality] in [Bluetooth Settings] to [Connection] (page 23).

There is no options menu during Internet streaming.

• Options menu is not available during Internet streaming.

Network connection

The player cannot connect to the network.

• Check the network connection (page 13) and the network settings (page 25).

The PC cannot connect to the Internet after [Wi-Fi Protected Setup™ (WPS)] is performed.

 The wireless settings of the router may change automatically if you use the Wi-Fi Protected Setup function before adjusting the settings of the router. In this case, change the wireless settings of your PC accordingly.

You cannot connect the player to the wireless LAN router.

- Check if the wireless LAN router is on.
- Move the player and the wireless LAN router closer to each other.
- Move the player away from devices that use a 2.4 GHz frequency band such as a microwave, Bluetooth or digital cordless device, or turn off such devices.

The desired wireless router do not appear in the wireless network list.

 Press RETURN to return to the previous screen, and try wireless setup again. If the desired wireless router is still not detected, select [New connection registration] to perform [Manual registration].

The message [A new software version is available. Please go to the "Setup" section of the menu and select "Software Update" to perform the update.] appears on the screen when turning the player on.

• See [Software Update] (page 20) to update the player to a newer software version.

Bluetooth connection

Bluetooth connection cannot be done/completed.

- Set [Bluetooth Mode] to [On] (page 23).
- Make sure the Bluetooth device is turned on and the Bluetooth function is enabled.
- Move the Bluetooth device closer to the player
- Connect the player and the Bluetooth device again. You may need to cancel the connection with the player using your Bluetooth device first.

- Delete pairing information once from the device list and connected device, before retrying connection.
- Connection may not be possible if other Bluetooth devices are present around the player. In this case, turn off the other Bluetooth devices.
- The connection registration information has been erased. Perform the connection operation again.

There is no sound, the sound skips or fluctuates, or the connection is lost.

- DVD AUDIO cannot be played via Bluetooth device due to DRM.
- Move the Bluetooth device closer to the player.
- Make sure the player is not receiving any interference from a Wi-Fi network, other Bluetooth device, other 2.4 GHz wireless device, or microwave oven.
- Check that the Bluetooth connection is properly made between the player and the Bluetooth device.
- Connect the player and the Bluetooth device again.
- Keep the player away from metal objects or surfaces.

Control for HDMI (BRAVIA Sync)

The [Control for HDMI] function does not work (BRAVIA Sync).

- Check that your TV is connected via the HDMI OUT 1 jack.
- Check that [Control for HDMI] in [HDMI Settings] is set to [On] (page 24).
- If you change the HDMI connection, turn the player off and on again.
- If power failure occurs, set [Control for HDMI] in [HDMI Settings] to [Off], then set [Control for HDMI] in [HDMI Settings] to [On] (page 24).
- Check the following and refer to the instruction manual supplied with the component.
 - the connected component is compatible with the [Control for HDMI] function.
 - the connected component's setting for the [Control for HDMI] function is correct.

- When you connect the player to a TV through an AV amplifier (receiver),
 - if the AV amplifier (receiver) is not compatible with the [Control for HDMI] function, you may be unable to control the TV from the player.
 - if you change the HDMI connection, disconnect and reconnect the AC power cord, or a power failure occurs, try the following: ①Switch the input selector of the AV amplifier (receiver) so that the picture from the player appears on the TV screen. ②Set [Control for HDMI] in [HDMI Settings] to [Off], then set [Control for HDMI] in [HDMI Settings] to [On] (page 24). Refer to the instruction manual supplied with the AV amplifier (receiver).

The System Power-Off function does not work (BRAVIA Sync).

• Check that [Control for HDMI] and [Linked to TV-off] in [HDMI Settings] are set to [On] and [Valid] (page 24).

Others

Playback does not start from the beginning of content.

 Press OPTIONS, and select [Play from beginning].

Playback does not start from the resume point where you last stopped playing.

- The resume point may be cleared from memory depending on the disc when
 - you open the disc tray.
 - you disconnect the USB device.
 - you play other content.
 - you turn off the player.

Message Code 1 [Playback stopped. The content being played is protected by Cinavia and is not authorized for playback on this device. For more information, see http://www.cinavia.com. Message Code 1] appears on the screen when playing a disc.

 The audio track of the video that you are playing contains a Cinavia code indicating it was intended for presentation using professional equipment only and is not authorized for playback by consumers (page 36).

The disc tray does not open and you cannot remove the disc even after you press ◆ OPEN/CLOSE.

- While the player is turned on, press STOP, HOME, and then TOP MENU button on the remote to unlock the tray and disable the Child Lock (page 10).
- Try the following: ①Turn the player off, and disconnect the AC power cord. ②Reconnect the AC power cord while pressing down
 ▲ OPEN/CLOSE on the player. ③Keep pressing down
 ▲ OPEN/CLOSE on the player until the tray opens. ④Remove the disc.

The message [[EJECT] Key is currently unavailable.] appears on the screen after ♠ OPEN/CLOSE is pressed.

 Contact your nearest Sony dealer or local authorized Sony service facility.

The player does not respond to any button.

 Moisture has condensed inside the player (page 3).

Playable discs

Blu-ray Disc*1	Ultra HD Blu-ray, BD-ROM, BD-R ^{*2} /BD-RE ^{*2}
DVD*3	DVD-ROM, DVD-R/ DVD-RW, DVD+R/DVD+RW, DVD AUDIO*4
CD*3	CD-DA (Music CD), CD-ROM, CD-R/CD-RW, Super Audio CD

- *1 Since the Blu-ray Disc specifications are new and evolving, some discs may not be playable depending on the disc type and the version. The audio output differs depending on the source, connected output jack, and selected audio settings.
- *2 BD-RE: Ver.2.1, BD-R: Ver.1.1, 1.2, 1.3 including organic pigment type BD-R (LTH type). The BD-Rs recorded on a PC cannot be played if postscripts are recordable.
- *3 A CD or DVD disc will not play if it has not been correctly finalized. For more information, refer to the instruction manual supplied with the recording device.
- *4 Some DVD AUDIO discs have hidden group and need password entry. Refer to the disc for the password.

Discs that cannot be played

- BDs with cartridge
- BDXLs
- DVD-RAMs
- HD DVDs
- PHOTO CDs
- Data part of CD-Extras
- Super VCDs
- Audio material side on DualDiscs
- A disc recorded in a color system other than NTSC, such as PAL (this player conforms to the NTSC color system).

Note on Discs

This product is designed to playback discs that conform to the Compact Disc (CD) standard. DualDiscs and some of the music discs encoded with copyright protection technologies do not conform to the Compact Disc (CD) standard, therefore, these discs may not be playable by this product.

Note on playback operations of Ultra HD Blu-ray/BD/DVD

Some playback operations of Ultra HD Bluray/BD/DVD may be intentionally set by software producers. Since this player plays Ultra HD Blu-ray/BD/DVD according to the disc contents the software producers designed, some playback features may not be available.

Note about double-layer Ultra HD Blu-ray/BD/ DVD and triple-layer Ultra HD Blu-ray

The playback pictures and sound may be momentarily interrupted when the layers switch.

Region code (BD/DVD VIDEO only)

Your player has a region code printed on the rear of the unit and will only play BD/DVD VIDEO labeled with identical region codes or

Playable types of files

Video

Codec	Container	Extension	With Audio
MPEG-1 Video*1	PS	.mpg, .mpeg	Dolby Digital, DTS, LPCM, MPEG
	MKV	.mkv	Dolby Digital, LPCM, AAC, MP3, Vorbis
	PS ^{*3}	.mpg, .mpeg	Dolby Digital, DTS, LPCM, MPEG
MPEG-2 Video*2	TS ^{*4}	.m2ts, .mts	Dolby Digital, DTS, LPCM, MPEG, AAC
	MKV*1	.mkv	Dolby Digital, LPCM, AAC, MP3, Vorbis
Xvid	AVI	.avi	Dolby Digital, LPCM, WMA9, MP3
AVIU	MKV	.mkv	Dolby Digital, LPCM, AAC, MP3, Vorbis
	MKV ^{*1}	.mkv	Dolby Digital, LPCM, AAC, MP3, Vorbis
	MP4*1	.mp4, .m4v	AAC
MPEG4/AVC/ H.264* ⁵	TS ^{*1}	.m2ts, .mts	Dolby Digital, DTS, LPCM, MPEG, AAC
	Quick Time*6	.mov	Dolby Digital, LPCM, AAC, MP3
	FLV*6	.flv, .f4v	LPCM, AAC, MP3
	3gpp/3gpp2*6	.3gp, .3g2, .3gpp, .3gp2	AAC
VC1*1	TS	.m2ts, .mts	Dolby Digital, DTS, LPCM, MPEG, AAC
	MKV	.mkv	Dolby Digital, LPCM, AAC, MP3, Vorbis
WMV9*1*7	ASF	.wmv, .asf	WMA9, WMA 10 Pro
VVIVIV9	MKV	.mkv	Dolby Digital, LPCM, AAC, MP3, Vorbis
Motion JPEG ^{*6} Quick AVI	Quick Time	.mov	Dolby Digital, LPCM, AAC, MP3
	AVI	.avi	Dolby Digital, LPCM, AAC, MP3
HEVC/H.265	MKV	.mkv	Dolby Digital, LPCM, AAC, MP3, Vorbis
	MP4	.mp4, .m4v	AAC
	TS	.m2ts, .mts	Dolby Digital, DTS, LPCM, MPEG, AAC
VP6	FLV	.flv	MP3
VP8/VP9	Webm	.webm	Vorbis
VF0/VF9	MKV	.mkv	Dolby Digital, LPCM, AAC, MP3, Vorbis

Format

AVCHD (Ver.2.0)*1*8*9*10

Music

Codec	Extension
MP3 (MPEG-1 Audio Layer	.mp3
AAC/HE-AAC*1*11	.m4a, .aac ^{*6}
WMA9 Standard*1	.wma
WMA 10 Pro*12	.wma
LPCM*11	.wav
FLAC*1	.flac, .fla
Dolby Digital*6*11	.ac3
DSF*1	.dsf
DSDIFF*1*13	.dff
AIFF*1	.aiff, .aif
ALAC*1	.m4a
Vorbis	.ogg
Monkey's Audio	.ape

Photo

Format	Extension
JPEG	.jpeg, .jpg, .jpe
PNG	.png ^{*14}
GIF	.gif ^{*14}
MPO	.mpo ^{*6*15}
ВМР	.bmp ^{*6*16}
WEBP	.webp

- *1 The player may not play this file format on a Home Network server.
- *2 The player can only play standard definition video on a Home Network server.
- *3 The player does not play DTS format files on a Home Network server.
- *4 The player can only play Dolby Digital format
- files on a Home Network server.

 *5 The player can support AVC up to Level 4.1.
- *6 The player does not play this file format on a Home Network server.
- *7 The player can support WMV9 up to Advance Profile.
- *8 The player can support frame rate up to 60 fps.
- *9 The player plays AVCHD format files that are recorded on a digital video camera, etc. The AVCHD format disc will not play if it has not been correctly finalized.
- *10 The player can play AVCHD 3D format.

- *11 The player can play ".mka" files. This file cannot be played on a Home Network server.
- *12 The player does not play coded file such as Lossless.
- *13 The player does not play DST encoded files.
- *14 The player does not play animated PNG or animated GIF files.
- *15 For MPO files other than 3D, the key image or the first image is displayed.
- *16 The player does not support 16bit BMP files.

Ø

- Some files may not play depending on the file format, file encoding, recording condition, or Home Network server condition.
- Some files edited on a PC may not play.
- Some files may not be able to perform fast forward or fast reverse function.
- The player does not play coded files such as DRM
- The player can recognise the following files or folders in BDs. DVDs. CDs and USB devices:
- up to folders in the 9th layer, including the root folder
- up to 500 files/folders in a single layer.
- The player can recognise the following files or folders stored in the Home Network server:
 - up to folders in the 19th layer.
 - up to 999 files/folders in a single layer.
- The player can support frame rate:
- up to 60 fps for AVCHD (MPEG4/AVC) only.up to 30 fps for other video codecs.
- The player can support video bit rate up to 40 Mbps.
- Some USB devices may not work with this player.
- The player can recognise Mass Storage Class (MSC) devices (such as flash memory or an HDD), Still Image Capture Device (SICD) class devices and 101 keyboard.
- To avoid data corruption or damage to the USB memory or devices, turn off the player when connecting or removing the USB memory or devices.
- The player may not play high bit rate video and audio files on DATA CDs smoothly. It is recommended to play such files using DATA DVDs or DATA BDs.

Specifications

Specifications and design are subject to change without notice.

System

Laser	Semiconductor laser
-------	---------------------

Inputs and outputs

Jack name	Jack type/Output level/Load impedance
DIGITAL OUT (COAXIAL)	Phono jack /0.5 Vp-p/75 ohms
HDMI OUT 1*/2	HDMI 19-pin standard connector
	* Only HDMI OUT 1 supports video output.
LAN (100)	100BASE-TX Terminal
USB	USB jack Type A (For connecting a USB memory, memory card reader, digital still camera, and digital video camera)* * Do not use for power charging purposes.

Wireless

Wireless LAN standard	Protocol IEEE802.11a/b/g/n
Frequency range	2.4 GHz, 5 GHz band
Modulation	DSSS and OFDM
Bluetooth Version	Bluetooth Specification v4.1

Bluetooth

Communication system	Bluetooth Specification v4.1
Output	Bluetooth Specification Power Class 1
Maximum communication range	Line of sight approx. 30 m
Frequency band	2.4 GHz
Modulation method	FHSS
Compatible Bluetooth Profiles	A2DP v1.2, AVRCP v1.3
Supported Codecs	SBC, AAC, LDAC
Transmission range (A2DP)	• 20 Hz - 40,000 Hz (LDAC in sampling 96 kHz and transmit by 990 kbps) • 20 Hz - 20,000 Hz (in sampling 44.1 kHz)

General

Power requirements	Rating: Input 120 V AC, 60 Hz
Power consumption	15 W
Dimensions (approx.)	430 mm × 265 mm × 50 mm (17 in. × 10 1/ ₂ in. × 2 in.) (width × depth × height) incl. projecting parts
Mass (approx.)	3.8 kg (8 lb ² / ₅ oz)
Operating temperature	5 °C to 35 °C (41 °F to 95 °F)
Operating humidity	25 % to 80 %

Copyrights and Trademarks

- Java is a trademark of Oracle and/or its affiliates.
- Manufactured under license from Dolby Laboratories. Dolby, Dolby Audio, and the double-D symbol are trademarks of Dolby Laboratories.



 For DTS patents, see http://patents.dts.com. Manufactured under license from DTS Licensing Limited. DTS, DTS-HD, the Symbol, & DTS and the Symbol together are registered trademarks, and DTS-HD Master Audio is a trademark of DTS, Inc. © DTS, Inc. All Rights Reserved.



- The terms HDMI[®], HDMI High-Definition Multimedia Interface, Premium High Speed HDMI Cable, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing, LLC in the United States and other countries.
- Blu-ray Disc™, Blu-ray™, BD-LIVE™, BONUSVIEW™ and Ultra HD Blu-ray™ word marks and the logos are trademarks of the Blu-ray Disc Association.
- Blu-ray 3D™ and Blu-ray 3D™ logo are trademarks of the Blu-ray Disc Association.



- "DVD Logo" is a trademark of DVD Format/ Logo Licensing Corporation.
- "DVD+RW", "DVD-RW", "DVD+R", "DVD-R", "DVD VIDEO", "DVD AUDIO", "Super Audio CD" and "CD" logos are trademarks.
- "BRAVIA" is a trademark of Sony Corporation.
- MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

- This product incorporates proprietary technology under license from Verance Corporation and is protected by U.S. Patent 7,369,677 and other U.S. and worldwide patents issued and pending as well as copyright and trade secret protection for certain aspects of such technology. Cinavia is a trademark of Verance Corporation. Copyright 2004-2010 Verance Corporation. All rights reserved by Verance. Reverse engineering or disassembly is prohibited.
- Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

This product is protected by certain intellectual property rights of Microsoft Corporation. Use or distribution of such technology outside of this product is prohibited without a license from Microsoft or an authorized Microsoft subsidiary.

Content owners use Microsoft PlayReady™ content access technology to protect their intellectual property, including copyrighted content. This device uses PlayReady technology to access PlayReady-protected content and/or WMDRM-protected content. If the device fails to properly enforce restrictions on content usage, content owners may require Microsoft to revoke the device's ability to consume PlayReady-protected content. Revocation should not affect unprotected content or content protected by other content access technologies. Content owners may require you to upgrade PlayReady to access their content. If you decline an upgrade, you will not be able to access content that requires the upgrade.

 Gracenote, the Gracenote logo and logotype, the "Powered by Gracenote" logo, and Gracenote MusicID are either registered trademarks or trademarks of Gracenote, Inc. in the United States and/or other countries.



- Wi-Fi[®], Wi-Fi Protected Access[®], Wi-Fi Alliance[®] and Miracast[®] are registered trademarks of Wi-Fi Alliance.
- Wi-Fi CERTIFIED™, WPA™, WPA2™, Wi-Fi
 Protected Setup™ and Wi-Fi CERTIFIED
 Miracast™ are trademarks of Wi-Fi Alliance.
- The Wi-Fi CERTIFIED Logo is a certification mark of Wi-Fi Alliance.
- The Wi-Fi Protected Setup Identifier Mark is a certification mark of the Wi-Fi Alliance.

- The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Sony Corporation is under license. Other trademarks and trade names are those of their respective owners.
- LDAC™ and LDAC logo are trademarks of Sony Corporation.
- "DSEE HX" is a trademark of Sony Corporation.
- SongPal Link and SongPal Link logo are trademarks of Sony Corporation.

SongPal Link

- Google Play™ and the Google Play logo are trademarks of Google Inc.
- Apple and the Apple logo, are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc.
- This product incorporates Spotify software which is subject to 3rd party licenses found here*: https://developer.spotify.com/esdk-third-party-licenses/
 - Spotify and Spotify logos are trademarks of the Spotify Group.*
 - * This function may not be available in some countries/regions.
- Opera[®] Devices SDK. Copyright 1995-2016 Opera TV AS. All rights reserved.



- All other trademarks are trademarks of their respective owners.
- Other system and product names are generally trademarks or registered trademarks of the manufacturers. [™] and [®] marks are not indicated in this document.

Copy Protection

Please be advised of the advanced content protection systems used in Ultra HD Blu-ray™, Blu-ray Disc™ and DVD media. These systems, called AACS (Advanced Access Content System) and CSS (Content Scramble System), may contain some restrictions on playback, analog output, and other similar features. The operation of this product and the restrictions placed may vary depending on the date of purchase, as the governing board of the AACS may adopt or change its restriction rules after the time of purchase.

Cinavia Notice

This product uses Cinavia technology to limit the use of unauthorized copies of some commercially-produced film and videos and their soundtracks. When a prohibited use of an unauthorized copy is detected, a message will be displayed and playback or copying will be interrupted.

More information about Cinavia technology is provided at the Cinavia Online Consumer Information Center at http://www.cinavia.com. To request additional information about Cinavia by mail, send a postcard with your mailing address to: Cinavia Consumer Information Center, P.O. Box 86851, San Diego, CA, 92138, USA.

Gracenote® End User License Agreement

This application or device contains software from Gracenote, Inc. of Emeryville, California ("Gracenote"). The software from Gracenote (the "Gracenote Software") enables this application to perform disc and/or file identification and obtain music-related information, including name, artist, track, and title information ("Gracenote Data") from online servers or embedded databases (collectively, "Gracenote Servers") and to perform other functions. You may use Gracenote Data only by means of the intended End-User functions of this application or device.

You agree that you will use Gracenote Data, the Gracenote Software, and Gracenote Servers for your own personal non-commercial use only. You agree not to assign, copy, transfer or transmit the Gracenote Software or any Gracenote Data to any third party. YOU AGREE NOT TO USE OR EXPLOIT GRACENOTE DATA, THE GRACENOTE SOFTWARE, OR GRACENOTE SERVERS, EXCEPT AS EXPRESSLY PERMITTED HEREIN.

You agree that your non-exclusive license to use the Gracenote Data, the Gracenote Software, and Gracenote Servers will terminate if you violate these restrictions. If your license terminates, you agree to cease any and all use of the Gracenote Data, the Gracenote Software, and Gracenote Servers. Gracenote reserves all rights in Gracenote Data, the Gracenote Software, and the Gracenote Servers, including all ownership rights. Under no circumstances will Gracenote become liable for any payment to you for any information that you provide. You agree that Gracenote, Inc. may enforce its rights under this Agreement against you directly in its own name.

The Gracenote service uses a unique identifier to track queries for statistical purposes. The purpose of a randomly assigned numeric identifier is to allow the Gracenote service to count queries without knowing anything about who you are. For more information, see the web page for the Gracenote Privacy Policy for the Gracenote service

The Gracenote Software and each item of Gracenote Data are licensed to you "AS IS." Gracenote makes no representations or warranties, express or implied, regarding the accuracy of any Gracenote Data from in the Gracenote Servers. Gracenote reserves the right to delete data from the Gracenote Servers or to change data categories for any cause that Gracenote deems sufficient. No warranty is made that the Gracenote Software or Gracenote Servers are error-free or that functioning of Gracenote Software or Gracenote Servers will be uninterrupted. Gracenote is not obligated to provide you with new enhanced or additional data types or categories that Gracenote may provide in the future and is free to discontinue its services at any time.

GRACENOTE DISCLAIMS ALL WARRANTIES EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND NON-INFRINGEMENT. GRACENOTE DOES NOT WARRANT THE RESULTS THAT WILL BE OBTAINED BY YOUR USE OF THE GRACENOTE SOFTWARE OR ANY GRACENOTE SERVER. IN NO CASE WILL GRACENOTE BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES OR FOR ANY LOST PROFITS OR LOST REVENUES.

© 2000 – present. Gracenote, Inc. All Rights Reserved.

Software License Information

For EULA (End User License Agreement), please refer to [License agreement] in the option menu on each network service icon.

For details of the other software licenses, please select [Setup] and refer to [Software License Information] in [System Settings].

This product contains software that is subject to the GNU General Public License ("GPL") or GNU Lesser General Public License ("LGPL"). These licenses establish that customers have the right to acquire, modify, and redistribute the source code of said software in accordance with the terms of the GPL or the LGPL.

The source code for the software used in this product is subject to the GPL and LGPL, and is available on the Web. To download, please visit the following website:

http://oss.sony.net/Products/Linux Please note that Sony cannot respond to any inquiries regarding the content of this source code.

Disclaimer regarding services offered by third parties

Services offered by third parties may be changed, suspended, or terminated without prior notice. Sony does not bear any responsibility in these sorts of situations.

About wireless LAN security

Since communication via the wireless LAN function is established by radio waves, the wireless signal may be susceptible to interception. To protect wireless communication, this player supports various security functions. Be sure to correctly configure the security settings in accordance with your network environment.

◆ No Security

Although you can easily make settings, anyone can intercept wireless communication or intrude into your wireless network, even without any sophisticated tools. Keep in mind that there is a risk of unauthorized access or interception of data.

♦ WEP

WEP applies security to communications to prevent outsiders from intercepting communications or intruding into your wireless network. WEP is a legacy security technology that enables older devices, which do not support TKIP/AES, to be connected.

♦ WPA-PSK (TKIP), WPA2-PSK (TKIP)

TKIP is a security technology developed to correct the deficiencies of WEP. TKIP assures a higher security level than WEP.

◆ WPA-PSK (AES), WPA2-PSK (AES)

AES is a security technology that uses an advanced security method that is distinct from WEP and TKIP.

AES assures a higher security level than WEP or TKIP.

Notes About the Discs

 To keep the disc clean, handle the disc by its edge. Do not touch the surface.
 Dust, fingerprints, or scratches on the disc may cause it to malfunction.



- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature may rise considerably inside the car.
- After playing, store the disc in its case.
- Clean the disc with a cleaning cloth. Wipe the disc from the center out.
- Do not use solvents such as benzine, thinner, commercially available disc/ lens cleaners, or anti-static spray intended for vinyl LPs.
- If you have printed the disc's label, dry the label before playing.
- Do not use the following discs.
- A lens cleaning disc.
- A disc that has a non-standard shape (e.g., card, heart).
- A disc with a label or sticker on it.
- A disc that has cellophane tape or sticker adhesive on it.
- Do not resurface the playing side of a disc to remove surface scratches.

Language code list

For details, see [BD/DVD Viewing Settings]

(page 23). The language spellings conform to the ISO 639: 1988 (E/F) standard.

	,		
Code	Language		_
1027	Afar	1028	Abkhazian
1032	Afrikaans	1039	Amharic
1044	Arabic	1045	Assamese
1051	Aymara	1052	Azerbaijani
1053	Bashkir	1057	Byelorussian
1059	Bulgarian	1060	Bihari
1061	Bislama	1066	Bengali
1067	Tibetan	1070	Breton
1079	Catalan	1093	Corsican
1097	Czech	1103	Welsh
1105	Danish	1109	German
1130	Bhutani; Dzongkha	1142	Greek
1144	English	1145	Esperanto
1149	Spanish	1150	Estonian
1151	Basque	1157	Persian
1165	Finnish	1166	Fiji
1171	Faroese	1174	French
1181	Frisian	1183	Irish
1186	Scots Gaelic	1194	Galician
1196	Guarani	1203	Gujarati
1209	Hausa	1217	Hindi
1226	Croatian	1229	Hungarian
1233	Armenian	1235	Interlingua
1239	Interlingue	1245	Inupiak
1248	Indonesian	1253	Icelandic
1254	Italian	1257	Hebrew
1261	Japanese	1269	Yiddish
1283	Javanese	1287	Georgian
1297	Kazakh	1298	Greenlandic; Kalaallisut
1299	Cambodian; Khmer	1300	Kannada
1301	Korean	1305	Kashmiri
1307	Kurdish	1311	Kirghiz
1313	Latin	1326	Lingala
1327	Laothian; Lao	1332	Lithuanian
1334	Latvian	1345	Malagasy
1347	Maori	1349	Macedonian
1350	Malayalam	1352	Mongolian
1353	Moldavian	1356	Marathi
1357	Malay	1358	Malese; Maltese
1363	Burmese	1365	Nauru
1369	Nepali	1376	Dutch
1379	Norwegian	1393	Occitan
1403	Oromo	1408	Oriya

Code	Language		
1417	Punjabi; Panjabi	1428	Polish
1435	Pashto; Pushto	1436	Portuguese
1463	Quechua	1481	Rhaeto- Romance
1482	Kirundi; Rundi	1483	Romanian
1489	Russian	1491	Kinyarwanda
1495	Sanskrit	1498	Sindhi
1501	Sangho; Sango	1502	Serbo-Croatian
1503	Singhalese; Sinhalese	1505	Slovak
1506	Slovenian	1507	Samoan
1508	Shona	1509	Somali
1511	Albanian	1512	Serbian
1513	Siswati; Swati	1514	Sesotho; Sotho southern
1515	Sundanese	1516	Swedish
1517	Swahili	1521	Tamil
1525	Telugu	1527	Tajik
1528	Thai	1529	Tigrinya
1531	Turkmen	1532	Tagalog
1534	Setswana; Tswana	1535	Tonga; Tonga islands
1538	Turkish	1539	Tsonga
1540	Tatar	1543	Twi
1557	Ukrainian	1564	Urdu
1572	Uzbek	1581	Vietnamese
1587	Volapük	1613	Wolof
1632	Xhosa	1665	Yoruba
1684	Chinese	1697	Zulu
1703	Not specified		

Parental control/area code

For details, see [Parental Control Area Code] (page 24).

<u> </u>	_		
Code	Area		
2044	Argentina	2047	Australia
2046	Austria	2057	Belgium
2070	Brazil	2090	Chile
2092	China	2093	Colombia
2115	Denmark	2165	Finland
2174	France	2109	Germany
2200	Greece	2219	Hong Kong
2248	India	2238	Indonesia
2239	Ireland	2254	Italy
2276	Japan	2304	Korea
2333	Luxembourg	2363	Malaysia
2362	Mexico	2376	Netherlands
2390	New Zealand	2379	Norway
2427	Pakistan	2424	Philippines
2428	Poland	2436	Portugal
2489	Russia	2501	Singapore
2149	Spain	2499	Sweden
2086	Switzerland	2543	Taiwan
2528	Thailand	2184	United
			Kingdom
2586	Vietnam		

Model Name:	I IDD_VQAA	/ LIDD_LIVON

Record the serial number (S/N) in the space provided below. Provide this number to your Sony dealer to get quicker action whenever you call them regarding this product. S/N $__$

4-687-309-**11**(1)

http://www.sony.net/ © 2017 Sony Corporation

Printed in Malaysia

